Appendix F Environmental Justice

# **Environmental Justice**

# **Summary**

The SR 509: Corridor Completion/I-5/South Access Road Project is not expected to have any high and adverse impacts nor will it disproportionately affect minority or low-income populations.

This determination is based on:

- ➤ Demographic makeup of the neighborhoods within the project area.
- Analysis of impacts identified by the Project's discipline studies and public comment and outreach.
- Incorporation of mitigation measures as identified in the Project's discipline studies.

The SR 509: Corridor Completion/I-5/South Access Road Project build alternatives were evaluated for compliance with Presidential Executive Order (EO) 12898 and Federal Highway Administration (FHWA) Order 6640.23. These orders establish that it is federal policy to avoid, to the extent practicable, disproportionately high and adverse human health or environmental impacts on minority or low-income populations.

#### Introduction

This report was prepared in compliance with Presidential EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994; and FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (FHWA Order 6640.23), dated December 2, 1998.

This report does the following:

- 1. Describes the proposed project and the project's build alternatives.
- 2. Describes the methodology and analyzes data used to make a determination.

3. Makes a determination as to whether or not the proposed SR 509: Corridor Completion/I-5/South Access Road Project is likely to have disproportionately high and adverse human health or environmental effects on minority and/or low-income populations.

This report also discusses the specific outreach efforts made to involve minority and low-income populations in the decision-making process.

# **Description of the Proposed Action**

FHWA, Washington State Department of Transportation (WSDOT), Port of Seattle, King County, and the Cities of Des Moines and SeaTac propose to improve regional highway connections with an extension of SR 509 to serve future transportation needs in southwest King County and to enhance southern access to and from Seattle-Tacoma International Airport (Sea-Tac Airport) by means of a new South Access Road. (Figure F-1 shows the location of the project area and Figure F-2 shows the project vicinity.) To accommodate an interchange at I-5 and SR 509, improvements to I-5 between approximately South 210th Street and South 310th Street are also proposed. The SR 509: Corridor Completion/I-5/South Access Road Project would improve regional highway connections, enhance southern access to and from Sea-Tac Airport, and improve related local traffic circulation patterns.

# **Description of Project Alternatives**

Three build alternatives (Alternatives B, C2, and C3) and a No Action Alternative (Alternative A) are considered in this FEIS.

# Alternative A (No Action)

The No Action Alternative (Figure F-3) represents the baseline conditions assumed to exist in the future regardless of whether the proposed project is constructed. Under the No Action Alternative, the SR 509 freeway extension, the South Access Road to Sea-Tac Airport, and the improvements to I-5 would not be built. This alternative, as well as the other alternatives, is defined in Chapter 2.

#### Features Common to All Build Alternatives

Each alternative for the SR 509 freeway extension would originate at approximately South 188th Street/12th Place South. The northern terminus of the South Access Road would be at the south end of the airport terminal drives. The southern terminus of the South Access

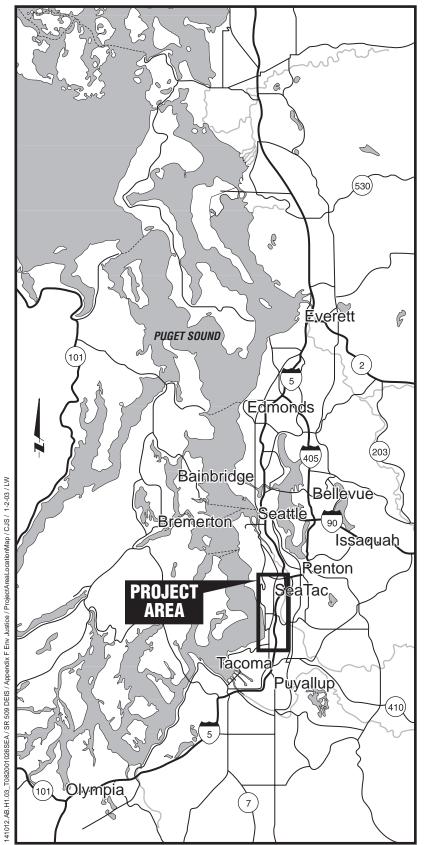
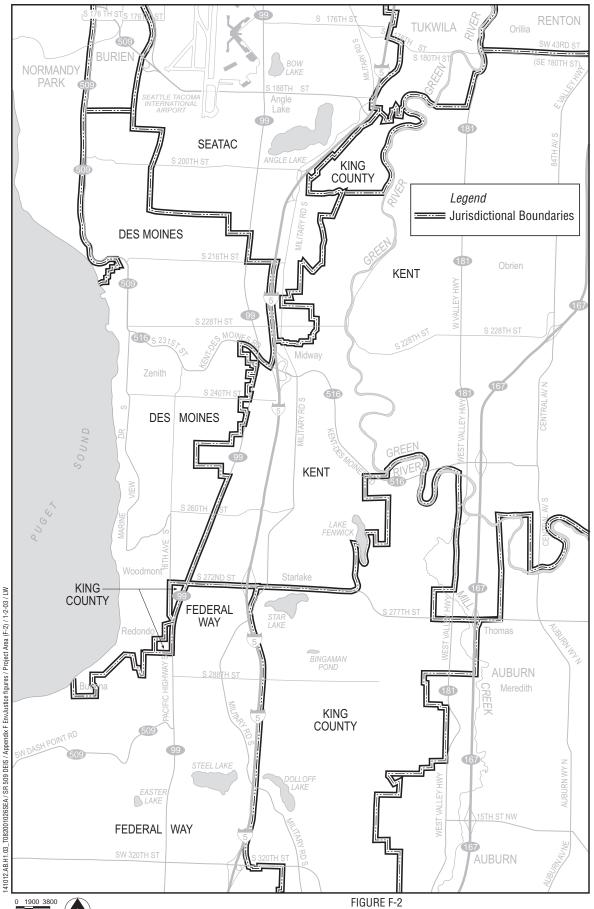
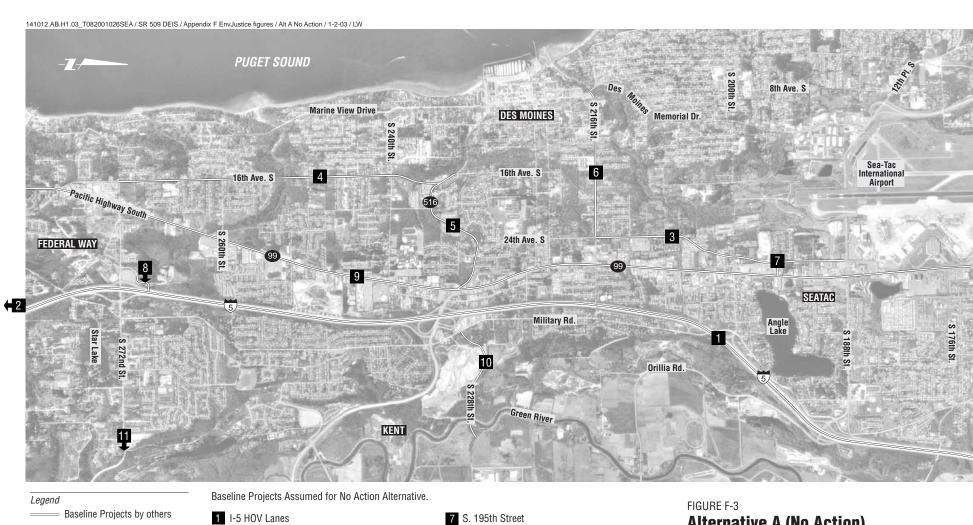


FIGURE F-1

Project Area Location Map SR 509: Corridor Completion/ I-5/South Access Road Environmental Impact Statement



# **Project Area**



- 2 I-5 @ S. 317th Street Direct Access Ramp
- 28th/24th Avenue S. Arterial (Phase 1 completed S. 188th to S. 204th Streets)
- 4 16th Avenue S.
- Kent-Des Moines (SR 516) Road
- 6 S. 216th Street

- 8 I-5 @ S. 272nd Street In-Line Station
- 9 Pacific Highway S./International Boulevard (SR 99) (Phases 1 and 2 completed S. 170th to S. 200th Streets)
- 10 S. 228th Street
- 11 S. 272nd/S. 277th Street Corridor

## **Alternative A (No Action)**

Road would connect with the SR 509 freeway extension; the location and design of this connection would vary with each alternative. There would be interchanges at South 200th Street and 28th/24th Avenue South, but not at SR 99. Improvements to I-5 would be the same for all build alternatives.

#### SR 509 Mainline/South Access Road

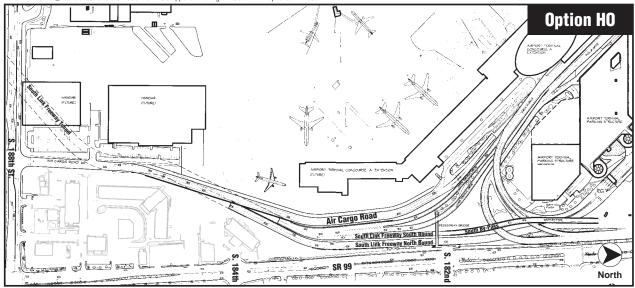
The configuration of the SR 509 freeway extension would be six lanes: two general purpose travel lanes and an inside high-occupancy vehicle (HOV) lane in each direction. The South Access Road would consist of two general purpose lanes in each direction, for a total of four lanes. In general, right-of-way widths would be at least 200 feet for the SR 509 freeway extension and at least 120 feet for the South Access Road. The SR 509 freeway extension would be designed to level of service (LOS) D and a speed of 70 miles per hour (mph). The South Access Road would be designed to LOS D and a speed of 35 to 45 mph.

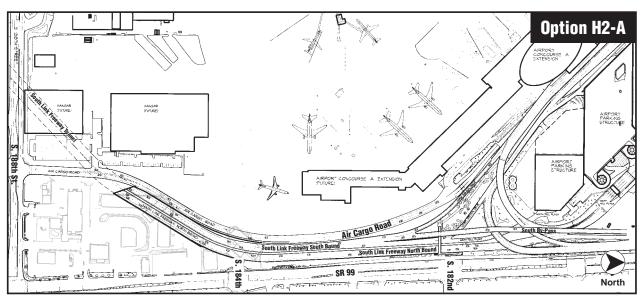
#### **South Airport Link**

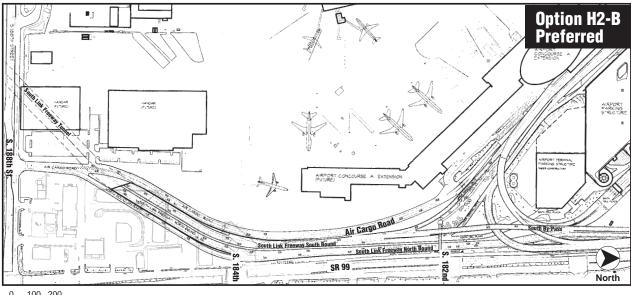
The South Airport Link, the last 1,000 feet of roadway connecting the South Access Road to the existing airport roadways, has three design options. At the south end, each design option crosses beneath South 188th Street and the southeast corner of Sea-Tac Airport via a tunnel. At the north end, the design options would maintain both southbound and northbound connections from the upper and lower terminal drives. Under Design Option H0, Air Cargo Road and the South Access Road would be "stacked" via an extended "S"-curve tunnel structure (Figure F-4). Under Design Option H2-A, Air Cargo Road and the South Access Road would generally parallel each other and would be separated by medians (Figure F-4). Design Option H2-B, the preferred alternative, would be essentially the same as Design Option H2-A, except that it would provide a local access route for northbound traffic into the airport at the intersection of South 188th Street and 28th Avenue South (Figure F-4).

#### Improvements to I-5

The southbound improvements to I-5 would include two new collector-distributor (C/D) lanes between the SR 509 convergence and SR 516, two new auxiliary lanes from SR 516 to South 272nd Street, and a new auxiliary lane from South 272nd Street to approximately South 310th Street, where the proposed project would match with an auxiliary lane to be constructed for the Sound Transit I-5 @ South 317th Street Direct Access Ramp project. On northbound I-5, a new auxiliary lane would extend between South 272nd Street and the







Approx. Scale in Feet

FIGURE F-4

# **South Airport Link Design Options** SR 509: Corridor Completion/I-5/South Access Road Environmental Impact Statement

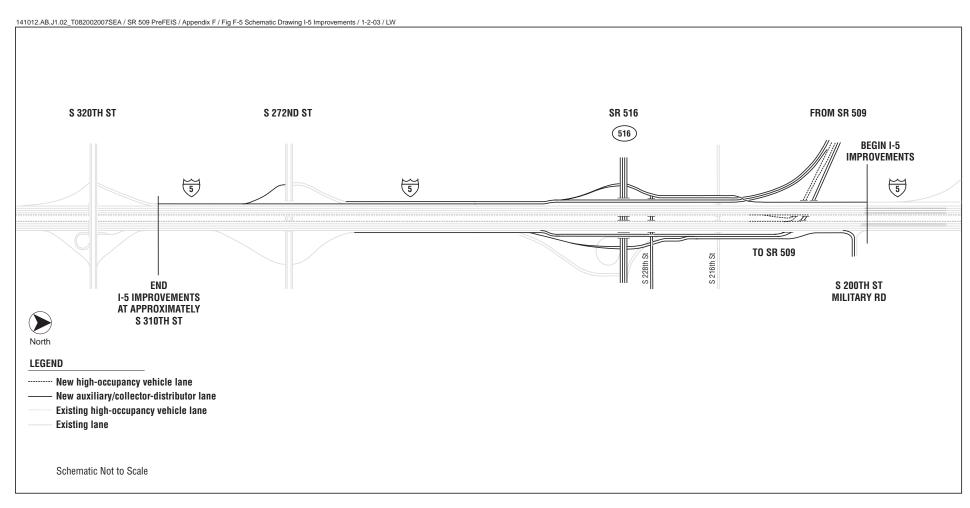


FIGURE F-5

Schematic Drawing of I-5 Improvements
SR 509: Corridor Completion/I-5/South Access Road
Environmental Impact Statement

SR 516 interchanges, and two new C/D lanes would start at the SR 516 interchange to serve I-5 traffic exiting to SR 509 and SR 516 traffic entering I-5. In addition, a South 228th Street extension and underpass would be constructed, providing a direct connection to northbound I-5 from South 228th Street and from southbound I-5 to South 228th Street. Figure F-5 presents a schematic of the I-5 improvements. These improvements would cover approximately 6.7 miles.

#### Alternative B

Under Alternative B, the SR 509 mainline would extend southward from its existing terminus at South 188th Street/12th Place South and intersect with I-5 in the vicinity of South 211th Street (Figure F-6). The freeway extension and the South Access Road would generally parallel each other in a north-south orientation on the west and east sides of Des Moines Creek Park, starting in the vicinity of South 208th Street and 24th Avenue South. The alignment would cross over Des Moines Creek and through Des Moines Creek Park at its narrowest point. The length of the SR 509 freeway extension (including the South Access Road) under Alternative B would be approximately 3.8 miles.

#### Alternative C2

Alternative C2, the preferred alternative, would begin at the existing SR 509 terminus at South 188th Street/12th Place South and intersect with I-5 in the vicinity of South 212th Street (Figure F-7). Alternative C2 would cross to the east on the north side of Des Moines Creek Park. The alignment would be elevated as it crosses the northeast corner of Des Moines Creek Park. The South Access Road interchange with SR 509 would be in the vicinity of South 208th Street and 24th Avenue South. The length of the SR 509 freeway extension (including the South Access Road) under Alternative C2 would be approximately 3.2 miles.

#### Alternative C3

Alternative C3 would begin at the existing SR 509 terminus at South 188th Street/12th Place South and intersect with I-5 in the vicinity of South 212th Street (Figure F-8). Like Alternative C2, Alternative C3 would cross to the east on the north side of Des Moines Creek Park; however, it would encroach further into the park than Alternative C2. Alternative C3 would also be elevated as it crosses the northeast corner of Des Moines Creek Park. The South Access Road interchange would occur in the vicinity of South 204th Street and 24th Avenue South. Under Alternative C3, the length of the SR 509

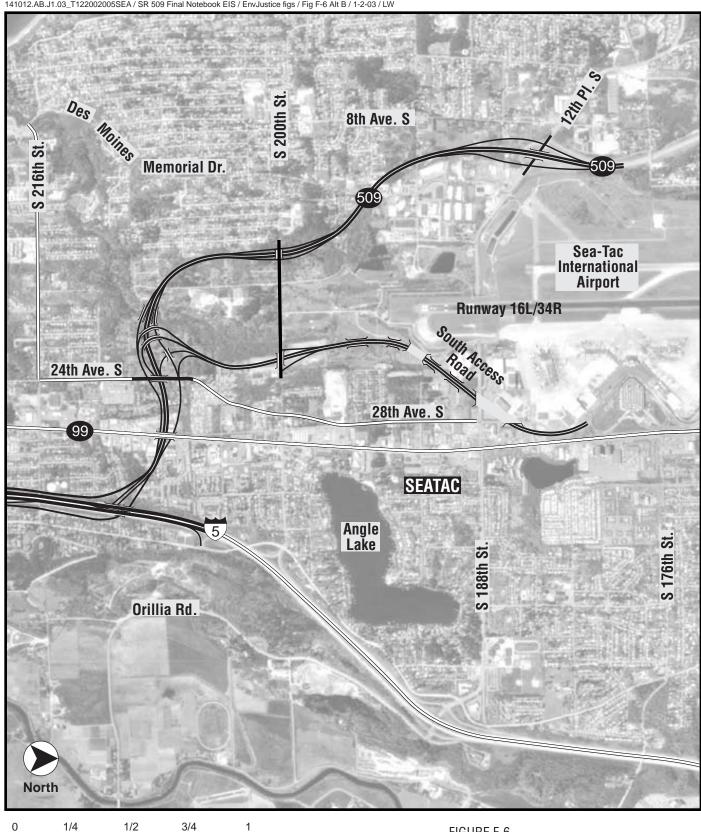
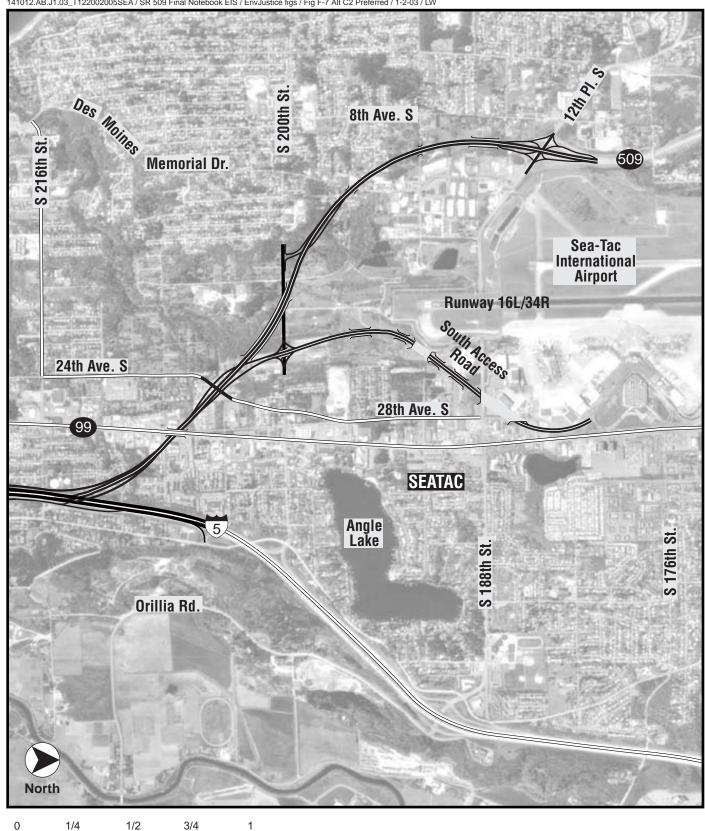
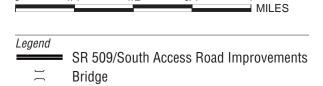




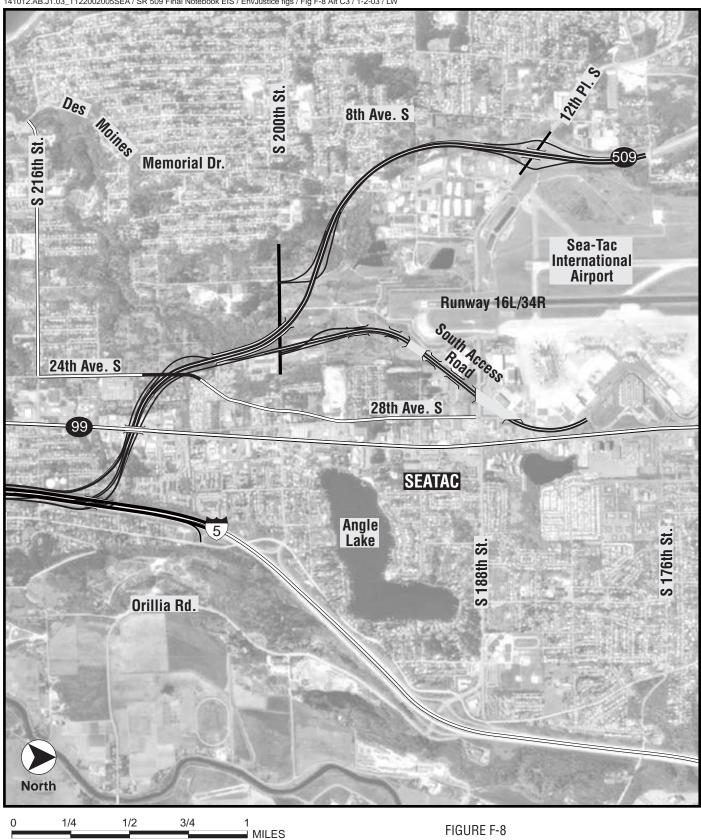
FIGURE F-6

### **Alternative B**





# FIGURE F-7 **Alternative C2 (Preferred)**



Legend

SR 509/South Access Road Improvements Bridge

#### FIGURE F-8

# **Alternative C3**

freeway extension, including the South Access Road would be approximately 3.5 miles.

#### Studies Performed and Coordination Conducted

#### Overview of EO 12898 and FHWA Order 6640.23

EO 12898, issued by President Clinton in 1994, requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...." In his memorandum transmitting EO 12898 to federal agencies, President Clinton further specified that, "each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969."

Guidance on how to implement EO 12898 and conduct an environmental justice analysis has been issued by the President's Council on Environmental Quality (CEQ 1997) and several federal agencies, including the U.S. Department of Transportation (DOT Order 5610.2) and the FHWA (FHWA Order 6640.23).

FHWA Order 6640.23 provides guidance on determining when a disproportionately high and adverse impact is likely and how to respond if such a finding is made. When determining whether a particular program, policy, or activity

"...will have disproportionately high and adverse effects on minority and low-income populations, FHWA managers and staff should take into account mitigation and enhancement measures and potential offsetting benefits to the affected minority or lowincome populations. Other factors that may be taken into account include design, comparative impacts, and the relevant number of similar existing system elements in non-minority and non low-income areas. FHWA managers and staff will ensure that the programs, policies, and activities that will have disproportionately high and adverse effects on minority populations or low-income populations will only be carried out if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not

practicable. In determining whether a mitigation measure or an alternative is "practicable," the social, economic (including costs) and environmental effects of avoiding or mitigating the adverse effects will be taken into account. FHWA managers and staff will also ensure that any of their respective programs, policies or activities that have the potential for disproportionately high and adverse effects on populations protected by Title VI ("protected populations") will only be carried out if:

- (1) a significant need for the program, policy or activity exists, based on the overall public interest; and
- (2) alternatives that would have less adverse effects on protected populations have either:
  - (a) adverse social, economic, environmental, or human health impacts that are more severe; or
  - (b) would involve increased costs of an extraordinary magnitude.

Any relevant finding identified during the implementation of this Order must be included in the planning or NEPA documentation that is prepared for the activity."

# Methodology and Approach

The proposed SR 509 project alternatives were evaluated for compliance with EO 12898 and FHWA Order 6640.23. For this type of analysis, three fundamental evaluation measures were used:

- 1. Determined whether minority or low-income populations exist in the project area. The terms "minority populations" and "low-income populations" were defined. Sources of data used included census data; school enrollment; anecdotal information from discussions with local officials, business owners, property owners and managers; and public meeting attendees.
- 2. Identified impacts that could potentially affect any minority and low-income communities of concern. This identification was based on the Project's disciplines studies and discussions with the authors, and results of public comment and outreach

efforts. Public involvement is key in achieving environmental justice. FHWA Order 6640.23 Part 5(c) states that FHWA will administer its governing statutes so as to identify and avoid discrimination and disproportionately high and adverse effects on minority populations and low-income populations by: (Subpart 4) "providing public involvement opportunities and considering the results thereof, including providing meaningful access to public information concerning the human health or environmental impacts and soliciting input from affected minority and low-income populations in considering alternatives during the planning and development of alternatives and decisions."

3. Determined if the identified potential impacts would have a high or adverse effect that would fall disproportionately on minority or low-income populations.

#### Affected Environment

The primary source of demographic data was the 2000 U.S. Census because it is the most comprehensive, complete, and detailed data source currently available. Block group-level statistics on minority composition, income level, and related information were obtained for each of the project area neighborhoods that would be affected by the build alternatives (see Section 3.10, *Social*, Table 3.10-1). Personal communications with public agency and school district staff, as well as property owners and managers, were used to corroborate U.S. Census demographic data and to identify pockets of low-income or minority populations that fall within the Census Blocks. The project area is composed of portions of five jurisdictions:

- City of SeaTac—8th Avenue South/Des Moines Drive, Home stead Park, Mansion Hill, Madrona, and Grandview
- City of Des Moines—Pacific Ridge and North Hill
- City of Kent
- City of Federal Way
- ➤ King County

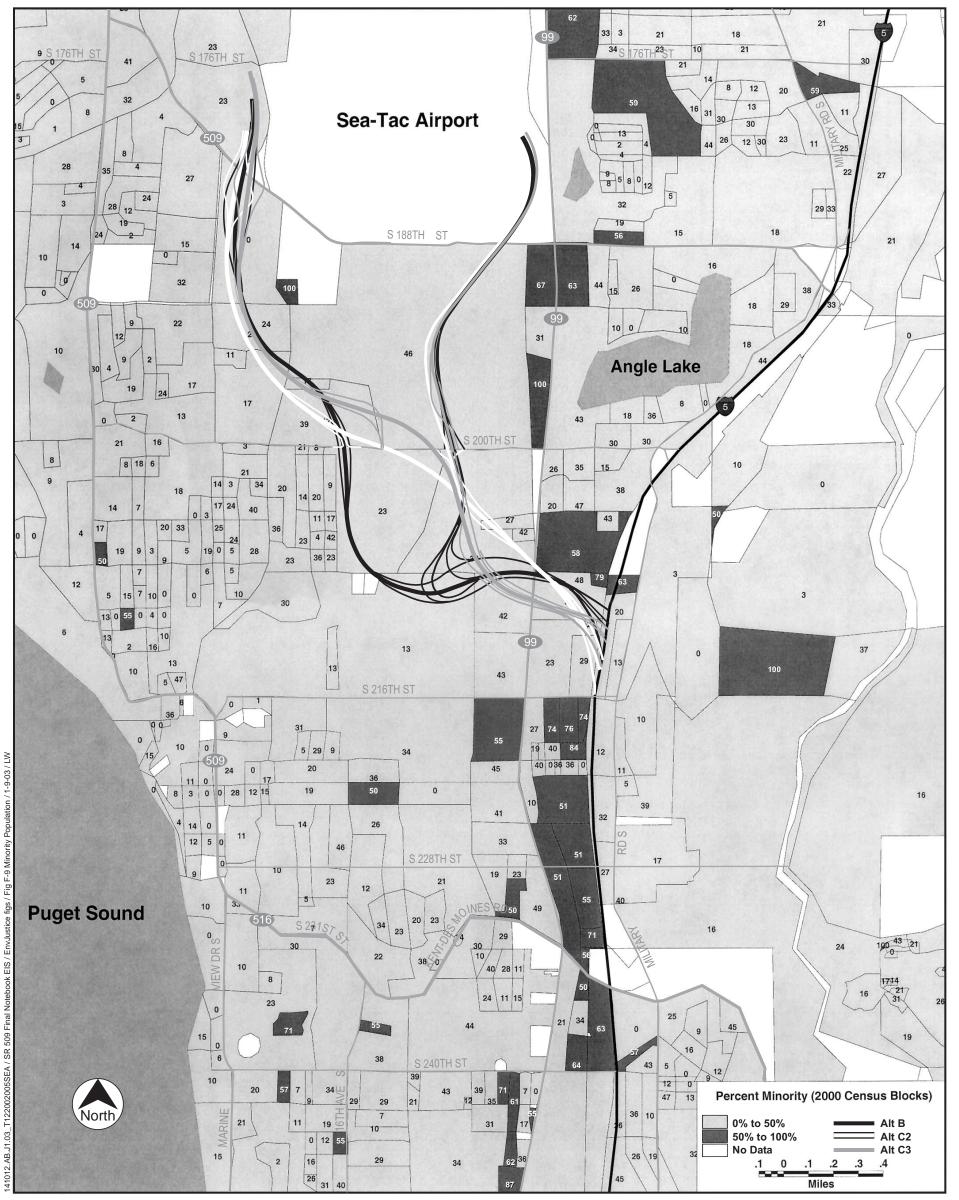
Based on the 2000 U.S. Census, the total population of the area within approximately one-half mile of the build alternatives is approximately 67,410. The minority population comprises approximately 33 percent of total project area population. The low-income population comprises approximately 12 percent of this total population.

For the purpose of this analysis, "low-income populations" and "minority populations" are defined as follows:

- ➤ Low-income population means a readily identifiable group of low-income persons whose median household income is at or below the Department of Health and Human Services poverty guidelines.
- Minority population means any readily identifiable group of minority persons (Black, Hispanic, Asian, American Indian, and Alaskan Native) who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed FHWA program, policy, or activity.

### Distribution of the Minority Population

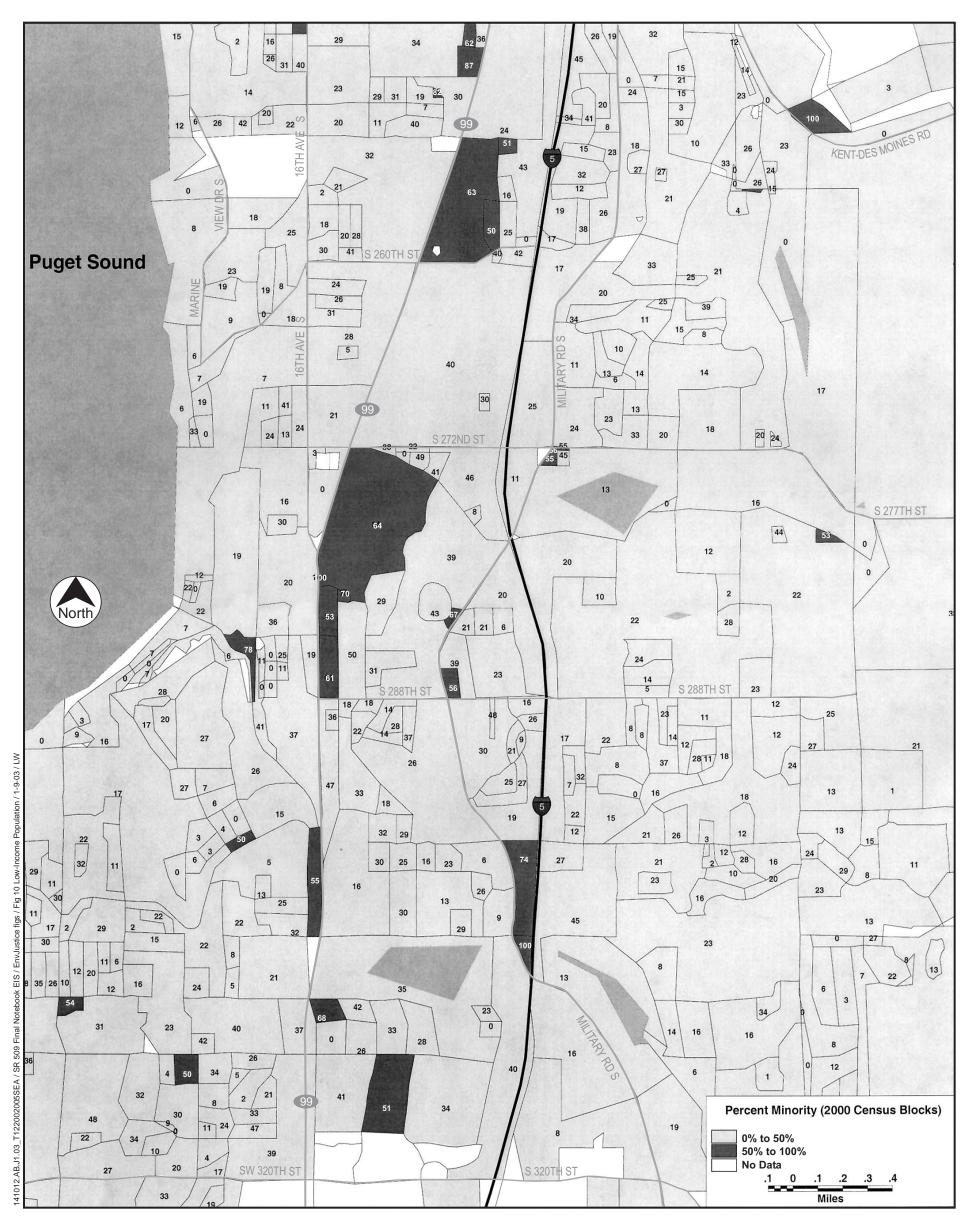
Figures F-9 and F-10 identify the minority population percentages of U.S. Census blocks in the vicinity of the build alternatives based on 2000 U.S. Census data. Personal communications with public agency and school district staff, as well as property owners and managers, were used to corroborate U.S. Census demographic data and to identify pockets of minority populations. As shown on these figures, many U.S. Census blocks in the project area are below 50 percent minority population. These census blocks were further evaluated to determine if pockets of minority populations existed that might be disproportionately affected by the impacts of the project. The neighborhoods with direct impacts or greater proximity impacts by the project (8th Avenue South/Des Moines Drive, Homestead Park, Mansion Hill, and North Hill) are located in census blocks not showing a 50 percent or greater minority population. Extensive public outreach, community meetings, and public hearings were conducted to communicate with the residents of these neighborhoods and gather information on the populations. In addition, detailed information was gathered through site surveys and discussions with potentially affected residents. The information gathered was consistent with the census data. These neighborhoods, which consist primarily of single-family homes or mobile homes, did not have pockets of high percentage minority populations, and those minority populations that do exist are interspersed evenly within the neighborhoods. For these neighborhoods, the minority population percentage of the affected area was determined to not be meaningfully greater than the minority population percentage in the general population.



Note: The number in each census block represents the percentage of minority population.

FIGURE F-9

# Minority Population in the SR 509 Build Alternatives Area



Note: The number in each census block represents the percentage of minority population.

FIGURE F-10

# Minority Population in the I-5 Corridor Area

There were, however, several U.S. Census blocks west of I-5 and others east of Sea-Tac Airport that are above 50 percent minority. These latter U.S. Census blocks have minority population densities high enough (i.e., greater than 50 percent) to be considered minority populations based on the following guidance contained in CEQ (1997):

"Minority populations should be identified where either:
(a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis."

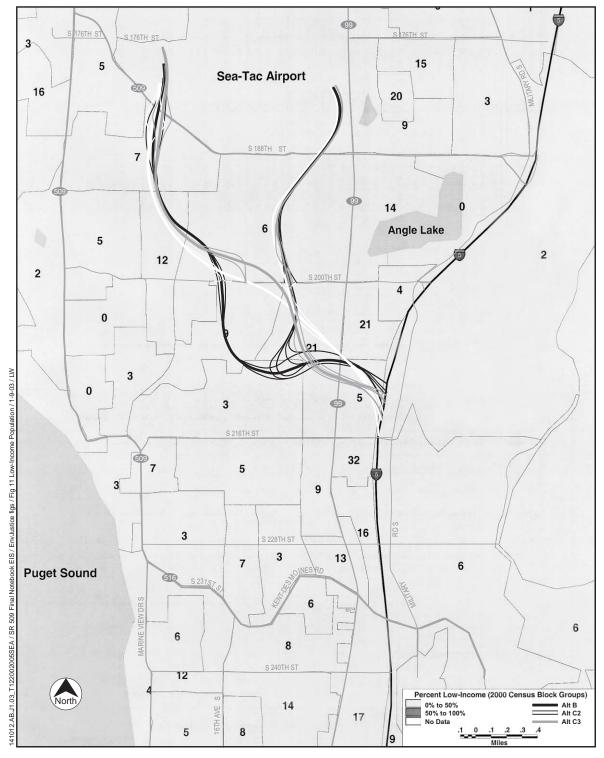
The census blocks with higher densities of minorities (as defined above) are found within the Madrona and Pacific Ridge neighborhoods (see Section 3.10, *Social*, Figure 3.10-1, for the location of these neighborhoods). These neighborhoods are the communities for which an impact analysis was conducted.

### Distribution of the Low-Income Population

Figures F-11 and F-12 identify the low-income population percentages of U.S. Census block groups in the vicinity of the build alternatives based on 2000 U.S. Census data. These figures show that the U.S. Census block groups in the project area have low-income populations. These percentages range from 0 percent to 32 percent, with about half of the block groups having low-income population percentages below 10 percent, and the other half above 10 percent.

Unlike the CEQ (1997) guidance on minority population, no environmental justice order or guidance document contains a quantitative definition of how many low-income individuals constitute a low-income population. In the absence of guidance, for this analysis the density used to identify minority populations (i.e., 50 percent or greater) was also initially used to identify low-income populations. Since there is no U.S. Census block group in the project area with 50 percent or more low-income population, personal communication with public agency and school district staff, as well as with property owners and managers, was used to corroborate census demographic data and to identify any pockets of low-income populations.

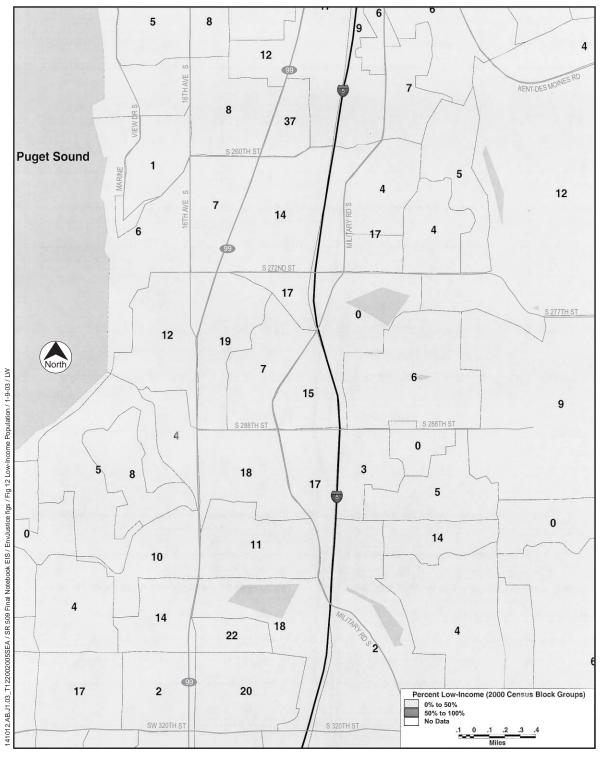
As determined through school district subsidized lunch program data, as well as low-income housing data provided by King County, census blocks potentially containing pockets of low-income residents are contained the Madrona and Pacific Ridge neighborhoods.



Note: The number in each census block represents the percentage of low-income population.

FIGURE F-11

# Low-Income Population in the SR 509 Build Alternatives Area



Note: The number in each census block represents the percentage of low-income population.

FIGURE F-12

# Low-Income Population in the I-5 Corridor Area

### Summary of Demographic Analysis

Based on the demographic analysis the specific minority and low-income communities of concern within project area are shown in Table F-1.

# Impact Identification

The series of discipline reports prepared for the SR 509 FEIS were reviewed to determine if there were environmental or human health impacts on the communities of concern. These impacts were compared to the comments received from the project's public outreach efforts to ensure that a comprehensive list is obtained before determining if these impacts would have an adverse and high impact, or disproportionate impact on the communities of concern.

### Discipline Studies

The series of discipline reports prepared for the SR 509 FEIS were reviewed to determine the environmental or human health impacts on the communities of concern, and discussions were conducted with discipline report authors to determine if any environmental or human health impacts could reach the high and adverse level after proposed mitigation measures.

For purposes of this analysis, National Environmental Policy Act significant adverse impacts, as identified by the professional analysts working on this FEIS, were considered to be synonymous with high and adverse impacts as described in EO 12898 and FHWA Order 6640.23. This decision was made since there is no official guidance on the definition of "high and adverse" in any environmental justice order or guidance document.

The areas that could potentially have impacts on the neighborhoods of concern include noise, social, and relocation impacts.

#### **Noise Impacts**

Based on the noise analysis conducted for the project, noise levels would be expected to increase up to 4.4 dBA in the Pacific Ridge neighborhood, and up to 13.4 dBA in the Madrona neighborhood. Total noise levels could exceed 67 dBA, which is the FHWA noise abatement criterion. Noise barriers along I-5 and the proposed SR 509 freeway extension in the vicinity of these neighborhoods were evaluated and are proposed for noise abatement in these locations (see Appendix I of this FEIS).

	Table F-1 Demographic Characteristics of Affected Census Blocks of Concern										
Neighborhood	Census Block(s)	Pop.	White	African Amer.	Amer. Ind./ Alaska Native	Asian/ Pacific Islander <sup>a</sup>	Hispanic <sup>b</sup>	Elderly <sup>c</sup>	Median Household Income <sup>d</sup>	Median Value of Owner- Occupied Housing Units <sup>d</sup>	Median Contract Rent <sup>d</sup>
Madrona	53033028802 2003	160	61.9%	16.9%	0%	19.4%	3.8%	11.9%	\$68,542	\$155,400	\$725
	53033028802 3000	92	20.7%	25%	2.2%	47.8%	1.1%	3.3%	\$43,125	\$162,200	\$653
	53033028802 3001	352	51.7%	17.6%	2.3%	15.3%	13.4%	6.5%	\$43,125	\$162,200	\$653
	53033028802 5004	1668	41.5%	23.6%	0.9%	12%	25.7%	3.1%	\$37,708	\$66,404	\$587
	53033028802 5005	227	56.8%	22%	0.9%	10.1%	11.0%	0.9%	\$37,708	\$66,404	\$587
Pacific Ridge	53033028902 1000	153	26.1%	28.1%	1.3%	30.1%	13.1%	1.3%	\$28,803	\$17,400	\$556
	53033028902 1007	268	16.0%	1.1%	0.3%	22.8%	71.6%	0.4%	\$28,803	\$17,400	\$556
	53033028902 3000	1	100%	0%	0%	0%	0%	0%	\$31,023	\$90,600	\$546
	53033028902 3001	86	48.8%	7.0%	0%	38.4%	9.3%	12.8%	\$31,023	\$90,600	\$546
	53033028902 3004	180	48.9%	14.4%	2.2%	24.4%	10%	7.2%	\$31,023	\$90,600	\$546
	53033028902 3005	387	45.5%	17.6%	1.0%	15.5%	20.7%	1.3%	\$31,023	\$90,600	\$546
	53033028902 3006	161	28.6%	39.1%	0.6%	10.5%	20.5%	1.2%	\$31,023	\$90,600	\$546
	53033028902 3007	52	44.2%	15.4%	0%	15.4%	17.3%	0%	\$31,023	\$90,600	\$546

Source: 2000 U.S. Census

Note: For racial characteristics "Other" and "Two or more races" are not depicted in these data; therefore, totals may not equal 100 percent.

<sup>&</sup>lt;sup>a</sup> Includes the Native Hawaiian race.

b Includes all races alone or in combination with one or more other races.

<sup>&</sup>lt;sup>c</sup> 65 years of age or older.

<sup>&</sup>lt;sup>d</sup> Income figures are at the census block-group level; all blocks in the same block-group have the same level of income, rent, and median house value.

#### **Social Impacts**

The discipline study on social impacts identified the following areas of potential effect:

- ➤ Community Cohesion—Community cohesion would be affected in all impacted neighborhoods to some degree through the loss of single- and multifamily homes, the physical fragmentation of residential areas, and the disruption of access to community facilities and services. Total impact on community cohesion was assessed by observing the pattern of right-of-way acquisition and the resulting physical disruption (such as demolition of houses and severing of neighborhood streets) that the proposed roadway would cause with each build alternative. The main difference between the three build alternatives is that Alternatives B and C2 would have greater impacts on the Madrona neighborhood, while Alternative C3 would have greater impacts on the Mansion Hill neighborhood.
- Services and Utilities—The project's primary impact on schools would be the disruption of access for students living within a school's attendance boundaries. Impacts would be most severe on children who live within the school district's "walk boundary," because those who live on the far side of the proposed roadway might be forced to make long detours to cross it. Neighborhoods where such impacts could occur include Homestead Park and Mansion Hill, where students walking to Madrona Elementary School would likely face more circuitous routes to school and additional traffic (only under Alternative B). Access to the Christian Faith Center School for those who walk or drive would also be more circuitous. Conversely, better traffic flow after construction would allow school buses to reach their destinations more quickly.

#### **Relocation Impacts**

Table 3.9-1 in Section 3.9, *Relocation*, summarizes the relocation impacts of each build alternative. Impacts are characterized by a range of potentially displaced single-family and multifamily residential units and businesses. Ranges occur in the displacement totals because either (1) only part of a building would be impacted, resulting in the potential to avoid displacements, or (2) there is a difference in the number of displacements for the South Airport Link design options. Through innovative roadway design, the total number of displacements may be reduced.

#### Public Outreach

Public comments were generally positive towards the project. Specific issues raised included concerns about:

- ➤ Noise impacts and noise barrier locations
- ➤ Bicycle and pedestrian access
- Acquisition and relocations issues
- > Desire to have this project built as soon as possible

No neighborhood or community group has come forward in opposition to this project at any of the public meetings or hearings, or through any other communication channel. The general response to this project has been favorable from almost everyone who has expressed an opinion.

Public input to the SR 509 project has been an essential element of the environmental analysis, documentation, and review process. Public involvement is ongoing and seeks to establish informed public consent for the population within the SR 509 project area. The SR 509 project area provided unique challenges for implementing a public involvement program. The project alignment is approximately 10 miles long and, based on the 2000 U.S. Census, approximately 67,410 people live within approximately one-half mile of the build alternatives. In addition, research revealed that the project area's special populations are served by few organized community organizations or media outlets, and instead are loosely affiliated.

In response, a multimedia approach to public involvement was implemented that incorporates both broad-based and highly targeted communication tools and strategies.

Outreach and involvement efforts included the following:

- Seven newsletters mailed to individual residents, their political representatives, and local officials
- Individual letters and graphics mailed to potentially affected residences and businesses
- Two public scoping meetings
- Six public open houses

- Multiple news releases to newspapers of general circulation and the minority press
- Newspaper articles, including interviews with mobile home owners
- Two public hearings

There was also a specific effort to inform and involve residents (and owners) of mobile home parks in the project area due to the unique nature and size of the mobile home park community. WSDOT committed to publishing meeting announcements in Spanish and Vietnamese, as well as in English, based on observations and input from several mobile home residents at the January 2001 public meeting, as well as examination of 2000 U.S. Census data.

In addition, attempts were made to conduct special information exchange meetings within the mobile home parks, using their community rooms; the park owners declined. Another attempt was made to conduct a special information exchange meeting at the nearby fire station, targeted at residents of the mobile home park that would be impacted by the build alternatives. When it was learned that using the fire station's community room is not permitted during evening hours (which are the most convenient time for working residents), this attempt was abandoned. Mobile home park residents have, however, participated extensively in the general open houses and hearings, and have had constant communication with project staff. During the ongoing SR 509 public outreach efforts, the Port of Seattle and Federal Aviation Authority (FAA) have also been conducting public meetings concerning the relocations related to the Part 150 Noise Remedy Program, which included targeted meetings with the mobile home residents, all of whom would be affected by the Part 150 plan.

During the open houses, project staff talked informally with participants. The general consensus of mobile home park residents, like that of most residents who have expressed an opinion, is favorable to the project. The findings that emerged from the public meetings were corroborated by a *Seattle Post-Intelligencer* article in March 1999 (see Appendix B in CH2M HILL September 2001), which was based on an interview with mobile home park residents who would be substantially displaced. It is important to note that since the publication of this newspaper article, these mobile homes will not likely be displaced as a result of this project. Instead, these residents would be relocated by the Port of Seattle and FAA as a part of the current Part 150 Noise Remedy Program for Sea-Tac Airport.

# **Impact Determination and Conclusion**

As discussed in the *Methodology and Approach* section above, a three-tiered approach was used to support a determination:

- ➤ Determination that there are minority and low-income populations within the project area, based on 2000 U.S. Census data, local agency and school district data, and supported by public outreach efforts and communication with property owners and managers.
- ➤ Identification of impacts, and the level of those impacts, that could affect those minority or low-income populations, as determined through the discipline reports.
- Determination of whether the project will have disproportionate high and adverse impacts on minority or lowincome populations, based on the severity of the impacts and the ability to mitigate those impacts, along with a determination of whether or not minority or low-income populations were disproportionately impacted.

As reported in the series of discipline reports prepared for the FEIS, the project has the potential for disproportionate impacts on low income and minority populations; however, based on the results of the analysis in this section, no disproportionate impacts are expected. With the proposed mitigation, it is believed that the impacts have been adequately mitigated, and are therefore not high and adverse. The expected impacts related to the communities of concern, as well as proposed mitigation, are identified in Table F-2.

Based on appropriate and adequate mitigation resulting in no disproportionately high and adverse impacts, the analysis concludes that the SR 509: Corridor Completion/I-5/South Access Road Project can therefore be considered to be consistent with the policy established in EO 12898 and FHWA Order 6640.23.

	Table F-2 Summary of Noise, Relocation, and Social Impacts					
Environmental Element	Alternative A (No Action)	Alternative B	Alternative C2 (Preferred)	Alternative C3		
3.2 Noise	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts		
	Based on the detailed method of noise analysis, peak-hour traffic noise levels would increase by 1 dBA at noise sensitive locations along I-5. Noise levels would	Noise levels at residences in the Madrona and Pacific Ridge neighborhoods could exceed in the FHWA noise abatement criteria. Noise levels along I-5	Same as Alternative B  Mitigation Measures  Same as Alternative B.	Same as Alternative B  Mitigation Measures  Same as Alternative B.		
	exceed noise abatement criteria at a few residential locations along I-5.	would increase slightly over 1 dBA relative to the No Action Alternative.				
	Mitigation Measures None proposed.  Construction (Short-Term) Impacts No impacts.  Mitigation Measures None proposed.	Mitigation Measures  Noise barriers would be provided at appropriate areas where residents would likely be impacted by traffic noise and where construction of the barriers is justified. Other possible mitigation measures could include building insulation, retaining existing trees and vegetation, thereby reducing noise annoyance psychologically by removing the noise source from view, and constructing land forms.				
3.9 Relocation	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts		
	None.	Madrona:	Madrona:	Madrona:		
	Mitigation Measures	1 business, 6-8 single-family units,	1 business, 2 single-family units,	2 businesses, 0-2 single-family units,		

	Table F-2 Summary of Noise, Relocation, and Social Impacts					
Environmental Element	Alternative A (No Action)	Alternative B	Alternative C2 (Preferred)	Alternative C3		
	None.	143 multifamily units, and 0 mobile homes.	69 multifamily units, and 0 mobile homes.	0 multifamily units, and 0 mobile homes.		
		5 Section 8 households	5 Section 8 households	0 Section 8 households		
		Pacific Ridge:	Pacific Ridge:	Pacific Ridge:		
		0 businesses, 3 single-family units, 95 multifamily units, and 0 mobile homes.	0 businesses, 3 single-family units, 95 multifamily units, and 0 mobile homes.	0 businesses, 3 single-family units, 95 multifamily units, and 0 mobile homes.		
		15 Section 8 households	15 Section 8 households	15 Section 8 households		
		Mitigation Measures	Mitigation Measures	Mitigation Measures		
		Displacees would be eligible for relocation assistance to find suitable and comparable relocation sites under the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended.	Same as Alternative B.	Same as Alternative B.		
		Most replacement housing is within walking distance of SR 99, which has good transit service.				
		WSDOT will find replacement housing already within the Section 8 program for those displaced persons who receive assistance. If Section 8 housing is not available, WSDOT will compute the entitlement.				

Table F-2 Summary of Noise, Relocation, and Social Impacts					
Environmental Element	Alternative A (No Action)	Alternative B	Alternative C2 (Preferred)	Alternative C3	
3.10 Social	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	Operation (Long-Term) Impacts	
	Community cohesion would be largely unaffected.  Mitigation Measures  None.	The substantial loss of affordable housing and displacement of minority households could affect Madrona's cultural balance. Because the roadway would travel through a corner of the neighborhood, barrier effects would be minimal. South 208th Street would be closed just west of SR 99.  Madrona residents would benefit from increased accessibility to employment centers. Access to businesses and public transit on SR 99 would also be maintained.  Pacific Ridge would retain its cohesiveness. No roads would be severed, and the circulation of internal traffic would be unimpeded. Connections to SR 99 and the neighborhoods would remain, and I-5 would be easily accessible. No barriers would be created because the project would be constructed on the edge of the neighborhood. The loss of multifamily units would represent a loss of affordable housing and would likely include the displacement of low-income households  Mitigation Measures  Construct new access	Alternative C2 would impact less of Madrona than Alternative B. A more moderate amount of affordable housing would be displaced, increasing the chance that households could be relocated nearby. The roadway would travel through the corner of the neighborhood, and barrier effects would be minimal.  Madrona residents would benefit from reduced traffic near the neighborhood which would increase accessibility to local and regional employment centers. Access to businesses and public transit on SR 99 would also be maintained. Madrona would experience an enhancement of dual access to SR 99, including access by traveling either north to South 204th Street or south via South 211th Street (Mansion Hill  Same cohesion impacts to Pacific Ridge.  Mitigation Measures  Same community cohesion mitigation as Alternative B, except for the loss of connectivity at South 208th Street. WSDOT would construct new access connections between South	Alternative C3 would nick a small corner of Madrona, resulting in a small number of displacements. There would be minimal effects on community cohesion. No barriers would be created through the neighborhood, and all internal circulation patterns would be unaffected. Access to nearby public facilities and services would remain the same.  The neighborhood would benefit from reduced congestion along SR 99.  Same cohesion impacts to Pacific Ridge.  Mitigation Measures  Same community cohesion mitigation as Alternative B.  Same recreational mitigation as Alternative C2.  Same service and utility mitigation as Alternative B.	

Table F-2 Summary of Noise, Relocation, and Social Impacts					
Environmental Element	Alternative A (No Action)	Alternative B	Alternative C2 (Preferred)	Alternative C3	
		connections between South 208th and the SR 99 corridor to preserve access to remaining apartment complexes in the Madrona neighborhood and single-family homes in the Homestead neighborhood.  Investigate the feasibility and benefits of maintaining through access on key streets and installing pedestrian access across the roadway.  Extend school bus routes to include children whose school access would be disrupted. Sidewalk construction related to access improvements would improve pedestrian access to Madrona Elementary School.  Access plans would be developed for emergency services in areas where street	208th and South 204th, and South 211th Streets to preserve access to remaining apartment complexes in the Madrona neighborhood.  Portions of the existing WSDOT right-of-way would be traded to local jurisdictions in exchange for acquired parkland. An extension of Des Moines Creek Park Trail would be incorporated into alignment design.  Same service and utility mitigation as Alternative B.		

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